# Chapter 1: Introduction to International Economics

## International Economics | February 18, 2026

### Agenda

- Course Orientation
- International Economics
- International Trade Theory
- Macroeconomic Aspect
- Trading
- Trade Openness
- Globalization

### Course Orientation

Nature of the Course

The course will be theory-based. It builds on basic economics concepts (micro and macro) and applies them to the international arena.

Recitation

- 1 point = complete and correct answer
- 0.5 point = incomplete answer

Examination

Midterm Exam – written examination
Final Exam – term paper

- IMRAD format
- Group work
- One international issue
- With pseudo-defense
- Up to 30% AI use is allowed

### International Economics

International economics deals with the economic interdependence among nations.

Salvatore (2001) defined that international economics analyzes the flow of goods, sends, and payments between a nation and the rest of the world (ROW), the policies directed at regulating the flow, and their effect on the nation's welfare.

Note: Salvatore states that trade leads to economic growth.

Interdependence – the dependence of two or more countries on each other.
– The movement or policy change of one country can affect others. The larger the country, the larger the global impact.

This economic interdependence among nations is affected by and influences the political, social, cultural, and military relations among nations.

Example: 2008 United States Mortgage Crisis

When there was excessive credit in the U.S., the Federal Reserve raised interest rates to control inflation. Higher interest rates made mortgages more expensive, and since wages did not increase proportionally, purchasing power declined and economic activity slowed down.

Higher U.S. interest rates strengthened the dollar, causing the Philippine peso to weaken. As a result, imports became more expensive and the purchasing power of Filipinos decreased.

Why is it important to study International Economics?

It develops students' critical thinking and technical skills applicable in real-word economic and policy scenarios.

Example: Being the country's President means to be a primary decision maker. Their decisions must be strategic since millions can be affected.

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### International Trade Theory

It makes up the microeconomic aspect of international economics because it deals with individual nations that are treated as single economic units.

Each trade includes the aspect of relative prices of commodities that are traded among nationals and it analyzes the basis of trade and the gains from the trade.

It also includes international trade policy, on the other hand, examines the reason for and the effects of trade restrictions such as those involving tariffs and quotas primarily imposed on a nation's import.

### Macroeconomic Aspect

1. Aggregate Demand – Total demand in the economy.
2. Exchange Rate – Price of one currency in terms of another.
3. Balance of Payments – Record of all international transactions. It does not always need exports to be greater than imports, but persistent trade deficits may indicate dependency.
4. Economic Growth – the increase in a country's production of goods and services over time
– Formula: GDP = C+I+G+S+(X–M)
– Economic growth ≠ economic development.
5. Government Policies – actions, decisions, and laws enacted by a government to address various issues within its jurisdiction.

### Trade

1. Internal trade – Trade within a country.
– This involves the flow of goods, services, and factors of production within the different parts of the same nation. For instance, goods coming from Manila may be sold to the provinces in Mindanao.
– Trading within ASEAN may be regional, but it is still considered internal trade because countries are separate sovereign states.
2. International trade – Trade between countries.
– This involves the flow of goods, services, and factors of production across national boundaries. Japan, for instance, may sell their manufactured cars to Philippine markets. The Philippines may also export its labor (OFWs) to other countries.

### Trade Openness

If trade is only 0–10% of GDP, the country is considered relatively closed. Low trade does not automatically mean bad. It indicates self-sufficiency.

If imports are much higher than exports, the country may be highly dependent on foreign goods.

### Globalization

Globalization involves culture, preferences, thinking, and economic integration.

Because of interdependence, countries are connected economically. This shows that economic events in one part of the world affects others.

# Chapter 2: Theories on International Trade

## International Economics | March 04 and 11, 2026

### Agenda

- Mercantilism
- Absolute Advantage
- Comparative Advantage
- Hecksher-Ohlin (H-O) Model
- Leontief Paradox
- Stolper-Samuelson Model
- Posner Model
- Vernon Model
- Reminders

### Mercantilism

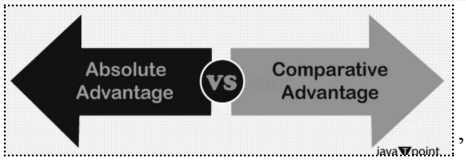
Mercantilism is a theory that was postulated by merchants, bankers, government officials, and even philosophers. They believed that for the nation to become rich and powerful was to export more than it imported (Salvatore 2001).

The government had to do all in its power to stimulate the nation's exports and discourage and restrict imports. The more valuable goods a nation has, the stronger it becomes in trade.

Mercantilism is not applicable today because it is already outdated. Its core idea measures a country's wealth based on the accumulation of gold and silver. Before, the more gold a nation had, the more powerful its ruler became.

Example: Oil – countries that have large oil reserves can earn more income from exports which influence global prices.

### Absolute Advantage




Trade between two nations is based on absolute advantage. When one nation is more efficient than (or has an absolute advantage over) another in the production of one commodity but is less efficient than (or has an absolute disadvantage concerning) the other nation in producing a second commodity, then both nations can gain by each specializing in the production of the commodity of its absolute advantage and exchanging part of its output with the other nation for the commodity of its absolute disadvantage (Salvatore, 2001).

This means that a country can produce goods more efficiently than another country, using less time or fewer resources. Its focus is on productivity and efficiency.

It opposes mercantilism, Wealth comes from efficient production, not hoarding gold.

| COMMODITY | PHILIPPINES | TAIWAN | WORLD TOTAL PRODUCTION |
|---|---|---|---|
| Computer | 25 units | 35 units | 60 units |
| Shirt | 45 units | 20 units | 65 units |

- Taiwan = 35 units of computer
- Philippines = 45 units of shirt

Both countries should specialize in the good where they have an absolute advantage to specialize the production process in order to increase efficiency.

| COMMODITY | PHILIPPINES | TAIWAN | WORLD TOTAL PRODUCTION |
|---|---|---|---|
| *Computer* | | *60* | 60 units |
| *Shirt* | *65* | | 65 units |

However, it does not happen in the real world because a country can produce any commodity. Ang choice ay nasa consumer if they will choose local or import to decide if alin mas mayroong world class value.

# Chapter 2: Theories on International Trade

## International Economics | March 04 and 11, 2026

Example #1: Consider two countries, Country A and Country B, that produce cars and wheat. The time required to produce one car in Country A is 2 hours, while in Country B, it takes 5 hours.

Similarly, Country A requires 4 hours to produce one ton of wheat, while Country B takes 6 hours. Based on this data, determine which country has an absolute advantage in car production and which has an absolute advantage in wheat production.

Answer: Country A has absolute advantage for both car and wheat.

| | Country A | Country B |
|---|---|---|
| Car | 2 hours | 5 hours |
| Wheat | 4 hours | 6 hours |

Example #2: Two companies, Company X and Company Y, manufacture laptops and tablets. Company X produces 50 laptops and 30 tablets per day, whereas Company Y produces 40 laptops and 25 tablets per day. Identify which company has an absolute advantage in laptop production and which has an absolute advantage in tablet production. Then, consider how these companies might benefit from trade if each focuses on the product in which it has an absolute advantage.

Answer: Company X has absolute advantage for both laptop and tablet.

If these companies focus on a product where they have an absolute advantage, both companies can access both products through trade, instead of producing everything themselves.

Specialization + trade = higher efficiency and more total output.

| | Company X | Company Y |
|---|---|---|
| Laptop | 50 laptops | 30 tablets |
| Tablet | 40 laptops | 25 tablets |

### Comparative Advantage

A nation should specialize in the production of and export of the commodity in which its absolute disadvantage is smaller (this is the commodity of its comparative advantage) and import the commodity in which its absolute disadvantage is greater (this is the commodity of its comparative disadvantage). Therefore, Comparative advantage occurs when a country, company, or individual can produce a good at a lower opportunity cost than another. (Salvatore, 2001).

This focuses on the opportunity cost. A country should specialize in the good it can produce at a lower opportunity cost, meaning the good it gives up less to produce.

Tip: When solving for opportunity cost, the good being given up is placed in the numerator, while the good being produced is placed in the denominator.

Example #1: Country X and Country Y producing cars and textiles. Country X can produce 10 cars or 50 textiles in one day, while Country Y can produce 6 cars or 30 textiles per day. Identify the opportunity cost for each country when producing cars and textiles. Then, determine which country

has a comparative advantage in producing cars and which has a comparative advantage in producing textiles. Based on your findings, explain how these countries can benefit from specialization and trade.

Answer: Country X has a comparative advantage for cars while Country Y is for textiles.

Example #2: Company A and Company B, producing furniture and home appliances. Company A can manufacture 20 pieces of furniture or 10 home appliances per week, while Company B can manufacture 15 pieces of furniture or 15 home appliances per week. By calculating the opportunity cost for each product, determine which company has a comparative advantage in furniture production and which has a comparative advantage in appliance manufacturing. Discuss how both companies could maximize their output by trading based on their comparative advantages.

Answer: Company A has a comparative advantage for furniture while Company B is for appliances.

Example #3: The United States and Mexico both produce corn and automobiles. The U.S. can produce 1,000 tons of corn or 500 automobiles in a given period, while Mexico can produce 800 tons of corn or 200 automobiles in the same period. Calculate the opportunity cost for each country when producing corn and automobiles. Based on this, determine which country should specialize in corn production and which should specialize in automobile production to benefit from trade.

## Hecksher-Ohlin (H-O) Model

In the 1930s two economists, Eli Hecksher and Bertil Ohlin, developed a new model that explained comparative advantage, the Hecksher-Ohlin theory or more popularly called the H-O model.

### Assumptions of the Model

1. There are two nations (Nation 1 and Nation 2), two commodities (commodity X and commodity Y), and two factors of production (labor and capital).
2. Both nations use the same technology in production.
3. Commodity X is labor intensive, and commodity Y is capital intensive in both nations.
4. Both commodities are produced under constant returns to scale in both nations.
5. There is incomplete specialization in production in both nations.
6. Tastes are equal in both nations.
7. There is perfect competition in both commodities and factor markets in both nations.
8. There is perfect factor mobility within each nation but no international factor mobility.

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9. There are no barriers. No transportation costs, tariffs, or other obstructions to the free flow of international trade.
10. All resources are fully employed in both nations.
11. International trade between the two nations is balanced.

### Important Concepts Discussed

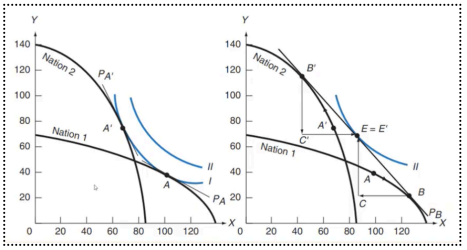
Constant returns to scale – kung dadagdagan mo ang input, proportionate din ang dagdag sa output. Halimbawa, dagdag 3 units ng labor, dagdag din 3 units ng output.

Incomplete specialization – bago ang trade, parehong bansa kaya pang magproduce ng parehong goods. Hindi pa sila fully nakafocus sa isa lang.

Indifference curve – ito ang nagpapakita ng preference ng consumers. Kapag same tastes ang two countries, same din ang preference pattern nila. (assumption #6)

### Analyzing the Graph

A nation will export the commodity whose production requires the intensive use of the nation's relatively abundant and cheap factor and import the commodity whose production requires the intensive use of the nation's relatively scarce and expensive factor.




### Panel A: Before Trade

Nation 1 and Nation 2 both have:

- own PPF (production possibility frontier)
- own indifference curve
- own equilibrium point (A for Nation 1, A′ for Nation 2)

- Nation 1 = labor-intensive
- Nation 2 = capital-intensive good

Prices are shown by PA and PA′. This means na magkaiba ang relative prices.

Yung tangency ng price line at indifference curve and optimal point of production and consumption bago ang trade. Sa point na to fully used ang resources ng nation.

Yung putol na line sa first panel means that wala pang trade. Domestic production pa lang ang basehan ng consumption.

### Panel B: After Trade

Dito nagstart ang specialization

- Nation 1 = moves to A”
- Nation 2 = moves to B’

The trade triangle part shows exchange or trade between two countries.

The change from indifference curve 1 to indifference curve 2, means na mas gumanda ang welfare or satisfaction ng consumers after trade. Mas marami at mas better combination of goods na ang pwede nilang ma-consume kaysa noong sarili lang nilang production ang basehan.

## Leontief Paradox

# Chapter 2: Theories on International Trade

## International Economics | March 04 and 11, 2026

Professor Wassily W. Leontief – made the first serious attempt to test the H-O model in 1953.

- Import substitutes are commodities, such as automobiles, that the United States produces at home but also imports from abroad (because of incomplete specialization in production)
- Leontief was forced to use U.S. data on import substitutes because foreign production data on actual U.S. imports were not available.
- Leontief found out that US import substitutes were about 30% more capital-intensive than US exports. Since the US is the most capital-abundant nation, this result was the opposite of what the H-O model predicted

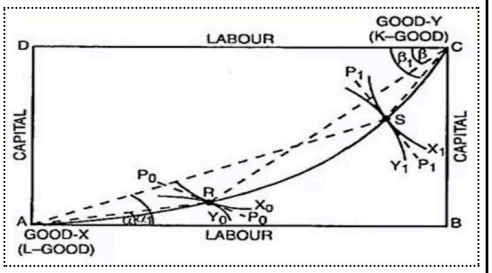
Main point is kahit nag-eexport ang isang country ng product, pwede pa rin na ang ibang raw materials o inputs nito ay galing sa ibang bansa.

### Stolper-Samuelson Model

The H-O theory determined that the labour-abundant country specialises in the export of labour- intensive commodities while capital-abundant countries specialize in the export of capital-intensive commodities.

The Stolper-Samuelson theorem demonstrates how changes in output prices affect the prices of the factors when positive production and zero economic profit are maintained in each industry.

Analyzing the Graph




- A to B = labor-intensive good
- B to C = capital-intensive good
- Point R = optimal production for labor-intensive good
- Point S = related sa production ng capital-intensive good

The graph shows na mas efficient ang isang bansa kapag mas nagfocus siya sa good na aligned sa abundant factor niya. Kung labor-abundant ang country, mas efficient siya sa labor-intensive production. Pero hindi ibig sabihin nito na titigil na siya completely sa ibang good; ang point lang ay mas dapat siyang magfocus kung saan siya may advantage.

### Posner Model

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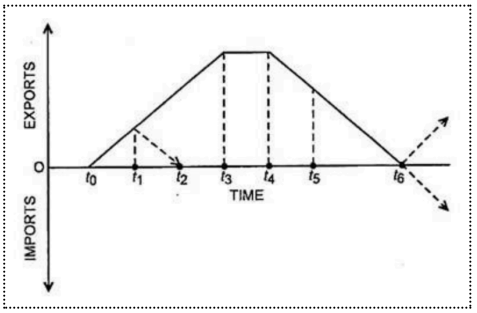
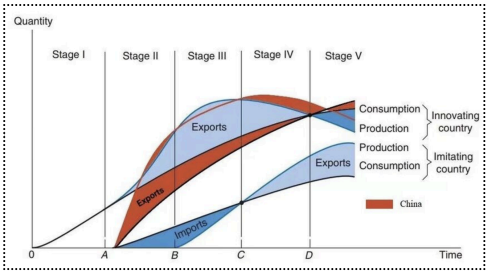



Initial Monopoly: Innovating countries enjoy a temporary monopoly and high demand when they invent a new product.

Imitation Lag (t1 to t2): Once exported, other countries eventually imitate the product, shrinking the innovator's market share.

Continuous Innovation: To avoid losing demand, the innovative country must constantly improve their products through research and development.

### Vernon Model




In the Vernon Model, the innovating country goes through five stages in the product cycle.

First, exports increase because the innovating country is the main producer. However, imports must be watched carefully because the imitating country may eventually learn how to produce the same product. Once that happens, the imitating country may become the new exporter, while the original innovating country may become the importer.

That is why research and development (R&D) is important. Producers must keep improving their product to maintain their advantage.

### Reminders

- Next week: Debate
- Will finish Chapter 3-4 next meeting or after debate.

# Non-tariff Trade Barriers and the New Protectionism

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### Agenda

- Free trade and regulated trade
- The nature of a tariff
- Different effects of a tariff
- Non-tariff barriers (NTBS) to trade
- Arguments for trade protectionism

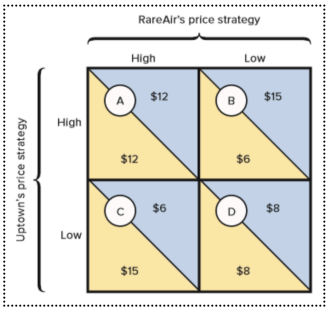
### Free Trade and Regulated Trade

#### Zero Sum and Positive Sum of Game

A zero-sum game is a mathematical representation in game theory and economic theory of a situation that involves two sides, where the result is an advantage for one side and an equivalent loss for the other.

The classicists, on the other hand, like Adam Smith and David Ricardo, advocated free trade where trading partners mutually benefited from trade, thus resulting in a "positive sum game". Through trade, world output is maximized.

Game theory is about making strategic decisions. This is a competition where there can be winners and losers.




- Yellow = Uptown's payoff
- Blue = RareAir's payoff

The diagram demonstrates a price war:

- If both choose High, both earns $12
- If both choose Low, both get $8
- If one chooses Low while the other chooses High, the one with Low gets $15

This shows that outcomes may be zero-sum or positive-sum depending on the strategies chosen and the interaction between the participants. This usually happens in an oligopoly market.

### The Nature of a Tariff

Aside from government revenue, tariffs protect local industries in competing with foreign producers that benefit from economies of scale.

Tariff – historically been the most important type of trade restriction. A tariff is a tax or duty levied on the traded commodity as it crosses a national boundary. (Salvatore, 2007). There are two classifications of tariffs: the import tariffs and export tariffs.

- Ad Valorem – expressed as a fixed percentage of the value of the traded commodity
- Specific – specific tariff is expressed as a fixed sum per physical unit of the traded commodity
- Compound – combination of an ad valorem and a specific tariff.

#### Tariff Rates in the Philippines

Republic Act No. 1937, enacted on June 22, 1957, is the Tariff and Customs Code of the Philippines, also known as the "Tariff Law of the Republic of the Philippines," which revised and codified the country's tariff and customs laws.

# Non-tariff Trade Barriers and the New Protectionism

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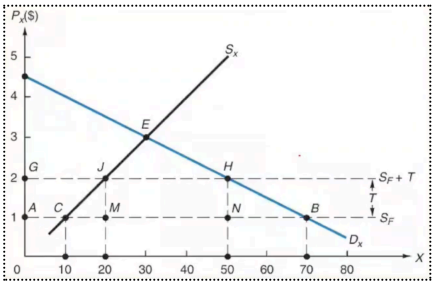
Republic Act (RA) No. 10863, otherwise known as the Customs Modernization and Tariff Act (CMTA), was signed into law on 30 May 2016. CMTA amended the Tariff and Customs Code of the Philippines (TCCP) with the aim of modernizing Customs rules and procedures for faster trade, reduce opportunities for corruption, improve Customs service delivery and improve supply chain.

In tariff commission, in-quota means imports within the allowed quota volume while out-quota is imports beyond the quota limit.

Partial Equilibrium Effects of a Tariff




Curves

- $D_x$ = import demand curve (downward sloping curve)
- $S_x$ = foreign export supply curve (upward sloping curve)

Before Tariff

- Starting point of local supply (production) = 10 at point C
- Starting point of local demand (consumption) = 70 at point B

Applying the imports formula ( $Imports = Q_d - Q_s$), the units of imports before tariffs are 60.

Under this unit count, supply of production for farmers increases dahil mas naeencourage ang farmers to produce more due to price increase.

After Tariff

- $S_F$ = price foreign sellers receive
- $S_F + T$ = price domestic buyers pay after tariff

At price 2, the imports are 30. (50-20)

- local supply = 20 (point J)
- local demand = 50 (point H)

- Points JHNM = Government revenue. This is the tariff revenue collected by the government on imports.
- Points JCM = Producer surplus
- Points HNB = Consumer surplus

## Non-Tariff Barriers (NTBS) to Trade

Import Quotas – It is a direct quantitative restriction on the amount of a commodity allowed to be imported or exported.

Import quotas can be used to protect domestic industry, to protect domestic agriculture, and/or for balance-of-payments reasons.

Voluntary Export Restraints – One of the most important of the nontariff trade barriers, or NTBs, is voluntary export restraints (VERs). These refer to the case where an importing country induces another nation to reduce its exports of a commodity "voluntarily," under the threat of higher all-around trade restrictions, when these exports threaten an entire domestic industry.

Technical regulations or standards – Governments commonly require goods to meet technical regulations or standards to be sold in the country.

These include safety regulations for automobile and electrical equipment, health regulations for the hygienic production and packaging of imported food products, and labeling requirements showing origin and contents.

International Cartels – An international cartel is an organization of suppliers of a commodity located in different nations (or a group of governments) that agrees to restrict output and exports of the commodity with the aim of maximizing or increasing the total profits of the organization.

Although domestic cartels are illegal in the United States and restricted in Europe, the power of international cartels cannot easily be countered because they do not fall under the jurisdiction of any one nation.

Dumping – Trade barriers may also result from dumping. Dumping is the export of a commodity at below cost or at least the sale of a commodity at a lower price abroad than domestically.

Export Subsidies – Export subsidies are direct payments (or the granting of tax relief and subsidized loans) to the nation's exporters or potential exporters and/or low-interest loans to foreign buyers to stimulate the nation's exports.